HOMEOWNER'S MANUAL

Harmony III™ Zone Control System

CONTROLS
505,024M
05/06
Supersedes 01/06

Technical Publications
Litho U.S.A.

IMPORTANT: Read this instruction manual completely! Retain for future reference.

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What is the Harmony III™ Zone Control System?

Lennox Harmony III™ Zone Control System manages the distribution of conditioned air to as many as four specific areas or zones in the home. The Harmony III™ control is an advanced control system that allows a home to be zoned for heating and cooling without the extra expense of purchasing two or more HVAC (Heating, Ventilation, and Air Conditioning) systems.

This control allows the owner to heat or cool occupied areas, without conditioning unused areas. The system adapts the HVAC components to provide a balanced and comfortable environment.

What does the system consist of?

The principle system component is the control center which acts as the “brains” of the Harmony III™ zone control system. It coordinates all of the operations of thermostats, motorized dampers, and HVAC equipment.

Harmony III™ zone control system uses off-the-shelf 1-heat/1-cool, non-power-robbing, non-heat pump electronic thermostats and motorized dampers with one of the following Lennox HVAC systems to distribute conditioned air to zones:

1. Option 1—Gas Furnace with Variable Speed Blower Motor (VSM) and either a single- or two-speed condensing unit.
2. Option 2—Blower coil unit with variable speed blower motor and either a single- or two-speed heat pump.
3. Option 3—Gas furnace with variable speed blower motor and heat pump.

How do I set the control center switches?

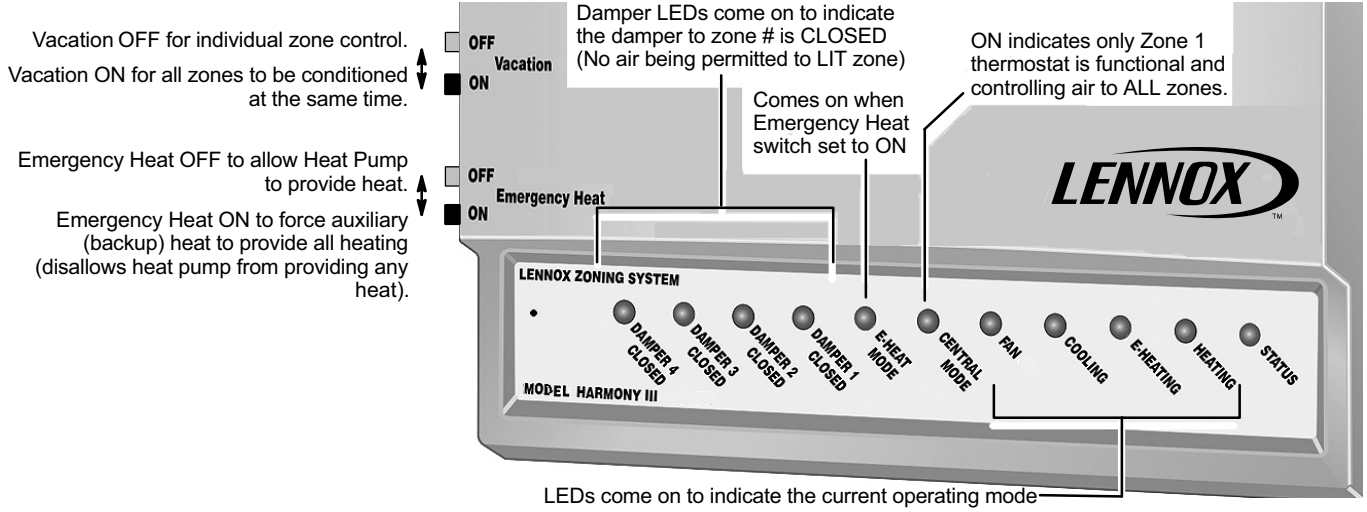
The Harmony III™ control center has only two ON/OFF switches (see illustration). For the most part, the system relies on thermostats to provide control of the desired comfort level for each zone. The control center also has LEDs (light emitting diodes) which light to indicate the current operating mode and which zone dampers are closed.

1. Vacation switch—The Harmony III™ control center operates in either of two modes: central mode (Vacation switch ON) or zone mode (Vacation switch OFF).
   - **Central mode** (Vacation ON) - all zones receive conditioned air at the same time (like traditional, non-zoned HVAC systems). The master thermostat (located in Zone 1) controls any heating or cooling need for all zones in the building.
   - **Zone mode** (Vacation OFF) - specific zones are conditioned only when the demand comes from that zone. Each zone (not necessarily each room) has its own thermostat. The individual zone thermostats only work when the control center is in zone mode.

2. Emergency Heat switch—When the Harmony III™ control center is used with a heat pump and the Emergency Heat switch is turned ON, the unit will satisfy all heating demands with electric backup heat. When the Emergency Heat switch is OFF, the heat pump is used to satisfy heating demands. *(This switch has no effect on operation in a non-heat pump system, for example, Option 1, described on page 2.)*

NOTE - Usually, Emergency Heat is more expensive to operate than Heat Pump heating. If so equipped, use Emergency Heat only when necessary.

To turn off the system, either: **A -** Turn each thermostat to OFF, or **B -** Turn the master thermostat OFF and turn the control center to central (Vacation ON) mode.



How do I use the thermostat controls?

Whether in central mode (where only zone 1 thermostat is functional) or in the zone mode (where all thermostats are functional), thermostats function as in a traditional, non-zoned, system. That is:

- HEAT setting tells the control center that it should provide heat to the zone(s) when it is needed.
- COOL setting tells the control center to provide cool air to the zone(s) when there is a need.
- AUTO setting allows either heating or cooling to occur, depending on the need. This selection is best in spring or autumn, when the temperature is cool in the morning but still warms in the afternoon. By placing the thermostats in AUTO, heating would come on in the morning and cooling in the afternoon, if needed.
- FAN AUTO or FAN ON tells the control center how the blower should operate. Select one or the other. FAN AUTO allows the blower to turn on and turn off with the heating or cooling needs. FAN ON tells the blower to run continuously. Zone-controlled dampers in the system make it possible to have some zones call for continuous fan (FAN ON) while other zones are set to FAN AUTO.

What does the service light indicate?

On heat pump systems only, the service light, located on the master thermostat, indicates that the outdoor unit requires service. The service lights on zone 2, 3 and 4 thermostats are not functional. Call your Lennox service technician if the service light on the zone 1 thermostat is lit.

How do I use the central (Vacation) mode?

When you choose central (Vacation ON) mode, heating and cooling will affect all zones.

1. Move the Vacation switch on the control center to ON.
2. Choose either HEAT or COOL or AUTO on the master (zone 1) thermostat.
3. Choose either FAN AUTO or FAN ON on the master thermostat.
4. Set master thermostat to desired room temperature.

How do I use the zone mode?

When you choose zone (Vacation OFF) mode, heating and cooling is controlled by specific zone thermostats.

1. Move the Vacation switch on the control center to OFF.
2. Choose either HEAT or COOL or AUTO on each thermostat (thermostats need not be set alike).
3. Choose either FAN AUTO or FAN ON on each thermostat (these may be set differently in each zone).
4. Set thermostats to desired room temperature.

How are zones determined?

Your Lennox dealer has sectioned the rooms of your home or building into zones using the following considerations:

1. Structural and Architectural Considerations—In multi-level houses using regular HVAC systems, heated air rises to the upper floor(s) causing those rooms become too hot. Zoning will remedy this situation by splitting the conditioned space into two specific zones (first and second floors). The second floor temperature is now controlled by its own thermostat, not that of the first floor.
2. Climate Considerations—Exposure from the sun and weather can produce cold and hot spots in homes that are conditioned with the use of one thermostat. Zoning lessens this by grouping rooms with the same exposure into one zone. Therefore, a room with a northern exposure and a room with a southern exposure should not be zoned together. In the winter, the northern room may be too cool while the southern room may be too hot. In order to keep a balance of conditioned air, the zone must contain rooms with the same weather exposure.
3. Occupancy Considerations—A single structure contains different types of living spaces. Without zoning, it is difficult to condition all areas so that everyone will be comfortable. Zoning a home or office allows the owner to control the zones which need to be conditioned. Rooms that are used or occupied at the same time are zoned together. Bedrooms which are generally used at night, should not zoned with a living room that is used only during the day or evening.

OWNER REMINDER! Be sure the system installer has recorded the zoning information in Table 1 on page 6 and has identified a contact person and phone number in case of problems.

Thermostat replacement

In the event a thermostat should fail and require replacement, be aware that not all thermostats will work for all systems. Certain types of thermostats, known as power-robbing thermostats, have no “C” (common) wire connection terminal; these can cause unintended system operation and therefore must not be used. Call your Lennox dealer to help you identify and install an appropriate thermostat with a “C” terminal.

Maintenance

Once your Lennox Harmony III™ Zone Control System is properly installed, no maintenance is required for the control panel’s components. Only standard heating and cooling equipment (HVAC) maintenance is required.

If you experience problems turning the system on to either heat or cool, the problem may simply be a programmed time delay, which, in most cases, would expire within 5 to 20 minutes. Such delays are normal and are built-in to assure proper equipment operation.

Table 1. Homeowner's Zone Information Record	
Zone number	**Record which rooms are zoned together and controlled by thermostat #**
1	
2	
3	
4	

Lennox Dealer: _____

Contact: _____

Telephone Number: _____

Installation Date: _____